

**Introduce a Girl to Engineering Day  
Thursday, February 23, 2006**

**Tour Descriptions**

| <b>Tour, Location and Field</b>   | <b>Description and Website</b>   |
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| <b><i>Geographic Information System (GIS)</i></b><br>EA 900/H05<br>Computer Engineering   | See how engineers can use computers to add information to maps that can help in solving all different types of problems from the best emergency evacuation routes from storms like Katrina to determining the best place to put the next middle school in your area.<br><a href="http://www.ead.anl.gov/project/dsp_topicdetail.cfm?topicid=31">http://www.ead.anl.gov/project/dsp_topicdetail.cfm?topicid=31</a>  |
| <b><i>Soil Analysis Laboratory (Phytoremediation Tour)</i></b><br>ES 362/B208<br>Environmental Engineering                        | The Phytoremediation Tour will show an environmental clean-up site where specially designed trees have been planted to absorb contaminated groundwater deep in the soil. Argonne environmental engineers and geologists have designed, installed and are now monitoring this 4 acre living outdoor laboratory as an economically better alternative to more conventional and very expensive cleanup methods. The tour will discuss environmental issues, groundwater monitoring and plant sciences.<br><a href="http://www.es.anl.gov/Energy_Systems/index.html">http://www.es.anl.gov/Energy_Systems/index.html</a> |
| <b><i>Advanced Powertrain Research Facility (APRF)</i></b><br>Building 371 Main Entrance<br>Mechanical Engineering                | Come see the newest hybrid automobiles and advanced engines being tested in the APRF. We test the fuel efficiency, emissions and performance of engines and vehicles. This tour will discuss some of the latest testing techniques.<br><a href="http://www.transportation.anl.gov">http://www.transportation.anl.gov</a>   |
| <b><i>Recycling Center</i></b><br>ES 362 Lobby<br>Mechanical and Process Engineering  | The "junk" from junked cars will find new uses under a new research partnership for recycling plastics. You will be visiting the Argonne recycling plant where plastics and other materials from obsolete automobiles, home appliances, and electronics can be separated for reuse. You will also see new automobile parts made with recycled plastics.<br><a href="http://www.es.anl.gov/Energy_Systems/Process_Engineering/index.html">http://www.es.anl.gov/Energy_Systems/Process_Engineering/index.html</a>   |
| <b><i>Beethoven Bones Study</i></b><br>APS Lobby<br>Biosciences   | Discover how engineers studied Beethoven's bones to determine the cause of his death.<br><a href="http://www.anl.gov/Media_Center/Frontiers/2002/c3facil.html">http://www.anl.gov/Media_Center/Frontiers/2002/c3facil.html</a>   |
| <b><i>World's Brightest X-ray Machine</i></b><br>APS Lobby<br>Physics   | We will visit the world's brightest x-ray machine and find out how x-rays are made and used by scientists. As an example, we will look deep inside the materials that are in devices like computers, iPods, and CD players to see actual atoms.<br><a href="http://www.aps.anl.gov/About/APS_Overview/index.html">http://www.aps.anl.gov/About/APS_Overview/index.html</a>   |
| <b><i>Remote Facility Experimental Set-up</i></b><br>CMT 205 Lobby<br>Mock-up Lab 211/B130<br>Mechanical and Chemical Engineering | Demonstration of glovebox operations and remote hot cell operations (mock-up). Demonstration of the remote set-up of (mock) nuclear waste from leaching experiments using remote manipulators. Students are allowed an opportunity to try the manipulators themselves.<br><a href="http://www.cmt.anl.gov">http://www.cmt.anl.gov</a>  |
| <b><i>Computer Access Grid</i></b><br>MCS 221 Lobby<br>Computer Engineering   | View first hand how to use a combination of multimedia resources (video cameras, large display screens, etc) to enable an interactive environment of physically separated people. The Access Grid is useful for large-scale meetings, training, seminars or working relationships between a large number of people located in many different places.<br><a href="http://www.accessgrid.org">http://www.accessgrid.org</a>  |
| <b><i>ATLAS Cryogenics</i></b><br>Building 203 Lobby<br>Physics   | Find out how engineers design machines that can explore an atom's nucleus.<br><a href="http://www.anl.gov/Science_and_Technology/Virtual_Tour/atlas.htm">http://www.anl.gov/Science_and_Technology/Virtual_Tour/atlas.htm</a>  |